

CDS-800 Mini CCD Array Spectrometer

**Comprehensive spectral measurements
in fractions of a second**

Accurate

The highly sensitive CDS-800 Mini CCD Array Spectrometer offers low noise and a broad spectral response with sensitivity range from 200 to 1100 nm. When coupled with a Labsphere integrating sphere, the spectrometer avoids the inherent photometric errors associated with filter-based photometers; data is accurate even for narrow-band light sources such as LEDs, solid state lighting, fluorescent lamps, and discharge lamps. In production, these systems can increase the throughput of quality assurance testing which facilitates improved statistical process control for higher manufacturing consistency and greater product quality.

Fast

Labsphere's CDS Mini CCD Array Spectrometer is a multi-channel spectral analyzer designed for real-time spectral analysis. Instantaneous spectral acquisition provides the radiometric, photometric, and color characteristics of the device under test (DUT). Fast results help to increase the rate of product development, decrease the time to market, and reduce development costs.

Easy to use

The CDS Spectrometer easily connects to a PC via a USB-2 port and uses a fiber optic cable to connect to the optical head, enabling the remote positioning of the spectrometer. Windows® software guides the user through testing procedures making complex spectral measurements simple while still meeting the needs of experienced researchers.



Value:

- Wide spectral range
- < 2.0 nm spectral resolution
- Wavelength accuracy < 0.5 nm
- Fast CCD array detector
- 3 m fiber optic input cable

Measure:

- Packaged LEDs
- Clustered LEDs
- Miniature lamps
- Entertainment lighting
- Automotive lighting

Ordering Information

Model Number

CDS-800 CCD Array Spectrometer

- Labsphere's CDS CCD Array Spectrometer
- 3 meter fiber optic input
- 2 meter USB-2 cable

Order Number

AS-81080-000

Specifications

Model Number

CDS-800

Wavelength Range:

200 - 1100 nm

Signal-to-Noise Ratio:

330:1 (at full signal)

A/D Resolution:

6 MHz

Dark Noise: (correctable)

16 RMS counts

Dynamic Range:

3330

Integration Time:

30 μ s to 40 s

Stray Light:

0.2 - 1%

Electronics

Power:

USB, 500 mA

Computer Operating Systems:

Windows

Computer Interfaces:

USB 2.0

Physical

Dimensions:

95 mm x 68 mm x 70 mm

Weight:

175 grams

Detector

Detector:

HAM S11639

Detector Range:

200 - 1100 nm

Pixels:

2048 pixels

Pixel Size:

14 μ m x 200 μ m

Compatible with:

Integral® Application Software

HELIOSense Application Software

Spectra-UT Ultra Tunable Spectral Calibration Sources

Spectra-FT Fine Tunable Spectral Calibration Sources

Illumia®Plus2 Systems

HELIOS®Plus Systems

